Field Trip No. 4

Sydney to Bogan-Macquarie Outbreak Area.

19/3/1939 – 2/4/1939.

K. H. L. Key.

Fourth Field Trip. 145 19/3/39 – 2/4/39.

Sydney to Bogan – Macquarie Outbreak Area.

19th. Dense timber N from Lithgow to ca. Capertee, where there was a certain amount of clearing. Even so, the road seemed mainly to run in a valley flanked on either side by timber-clad ranges. Ca. 5 mo. from Rudgea this valley flattened & broadened into a definite plain, still bounded by ranges at a distance, which seemed to converge again N of Rudgea. Chap told me there was a valley (Bylong V.) from Rylstone to H.R.V. (Sandy Hollow) Soil, Lithgow to Rudgea, buff to clay red in patches. In general, I would have doubted that swamp could reach this region.

20th. a. From Rudgea to Sydney, & then to Wellington. There was no serious barrier. Hills undulous, mostly Granite. Soil was buff red until ca. 1 way to Wellington, when it became more or less uniformly rich red, with large Kurrajongs. Eucalyptus (?) Sappa Bundy ridges timbered, mostly box, was again seen as a very common species (vegetation generally wooded). Consistently rich red from Wellington to Dubbo, except for one small, clear patch on the Geological Survey Notes) & the

rugged red outcrops at Bowley Road - Well.
Cottonia Dam Pyrenochetus, Chem + Physics.
Probably the whole region right from Well -
Gingin + Cropleton - Brimaway to Yan Yan +
Jeal Jeale Springs has similar soil provinces
rather for Combs - Coorlook.)

21/ Dubbo - Narromine at first the same red
red loam but by 9 miles out a quite distinct
soil type had come in (the light sandy loam
of previous notes) This Colour appears due to
reddish sand grains on surface. When ploughed
appearance is brown or very slightly reddish
brown. Ridges were distinctly the reddest +
on flats there was sometimes hardly any red
but brownish. These areas were not clearly
connected with the Mudgeeraba, but occurred in
the lower levels. At Dubbo the road is
running through typical red country.

Took the lower train road to Warren. 19.5
Narromine. 35.2 Clay pan (quite large - ca ¼ mile)
Runs for country but these mainly grey soil.
Real self-mulching. More reddish or rises,
more greasy in hollows. Country very flat
right from Narromine. Small clay pans at
40. Odd Mulga + other bushes (eg. Currant bush)
All wooded in natural state.

two plades from 40 ms. which might have been slightly self-mulching, 43.5 ms. Open mixed with reddish sandy soil, bordered by mallee, etc., with odd dead branches, porcupine grass, etc. Much otherwise bare. Similar to area at base Comeb. 45. Similar but with larger patches of mallee, just short of Selby Highway (Ca. 6 miles NE).

Between Highway & Warren country was heavier, more uniform, becoming steadily more so towards Warren. Borce was encountered a few ms. from Warren. There was hardly any sign of either ridges or clay-pans in this region. It was very noticeable, as soon as the greasy to heavy country was entered soon after Narromine, how "herbage" predominated, in many places exclusively, in the pasture (clovers, Malvaceae & many other plants).

Warren to Testris (Hoskes) on Collie road. — for ca. first 12 miles country was mainly heavy, but with lighter ridges. After the Collie turn-off it was very various. There were long stretches of red friable sandy loam

with mulga, currant bush & sometimes belah ridding hard bare areas & heavy salt marshy areas. The soil veg. classification is by no means simple. Eg. bare plain areas might be predominantly grass, herbage & low saltbush. Some such grass areas had little "Dribbs" bushes as well. Cherry was relatively abundant on grass plain areas within the 22 miles from Warren to Firth's there was practically every soil-veg. type except extreme (on Dgyk.) flood-plain. Prob. the uniformly heavy country seen from along the river road is confined to the vicinity of the rivers & creeks, as the Collie road runs roughly ∥ to it, but not close to rivers. This Collie road may prove a very useful transect. Soil, veg & pop. shd to be studied in the adjoining 4 shires. [N.B. During latter ⅓ of this trip, road runs along Marthagny Creek.]

× close to Marthagny Ck.

Firth's. Still is opposite to poisoning. Did not object to idea that swamp adjt. might be vicinity. Gave rough maps, but has an accurate map of paddocks on which he could show dists of soil types. "Black" soil

is Cumic rather heavily for grey soil, either self-mulching to "firm". The "sandy loam" is of the friable type described above. The sandy loam of Frange he said was more the "scalds" type. He says that diff. types of pasture developed in adjacent paddocks. This could only be the result of diff. conds. of growing. This diff. was in fact most marked. I made a transect from the homestead across the road to Marthaguy Creek. The paddock adjoining the homestead was mainly Cynodon with succulents. Through the first fence (paddock 1) was entered a very uniform grass paddock with Chloris truncata & Bothriochloa as dominants with numerous Solanum plants & an undergrowth of clovers. Across the road (paddock 2) was herbage again, including saltbush, but mainly Solanum eastiale another very green leaved plant (paddock 3) & Geranium pilosum → (Crow-foot). Fitch also said that the species which would come up in any paddock varied greatly with time of year. All these factors complicate the ecological picture tremendously. He said that locusts in this region during "rain days" scattered all over the place.

Portulaca oleracea
Tribulus terrestris

Left to Collie — Similar Country

Coltre to Bundinas. – Dundas country. Some of it, with Eubak vallys, reminded me a bit of Country N of Inyrie. Site 1, near the 22T. mile peg. Several tall grasses, as well as boral pure stands of other grasses. – little herbage. C. term. was more numerous here than anywhere else so far seen. & Ocdaleus was also fairly common. This site shants to be revisited. NB the tall grasses were only a priority. Many pure stands had seen near (Stock route)

Bundinas 40,000 Body is an extremely alert & intelligent man, comparably only with Young of Inyanda Q. He immed. admitted that this part was the source of all the locusts in the world, which proved S.E. He had seen get as far as Charleville & the 18in. country, south from here & the Warrambungles. Plagues were rare here 20 years ago. There is no doubt that their severity & frequency has since increased. He said damage was not great in the heaviest country, did not consider that soil type was important. It was only in recent years that they had been in outbreak after outbreak. This is a

who has lived all his life with his father before him. In many ways Bundera would be an ideal native forest soil immediately after Bundera scrub scalded patches.

Mack's (unmarked). He seems to know something about forests. Large holding. Preparing map.

Roberts. Small holding. Preparing map. The transect was near Callie-Trangie would prob. include all types of country the easiest W. Cassie, Yarrangroo (Cunnoka Pl. 6 ft.) would have learnt if there was any about myall plains N of Warren or scrubby the heaviest country by far yet seen the big Natural trees except for myall

in patches around the edges. Tufted perennial
patches at this stage mostly dead. Less
plasticine owing to heavy soil
~~similar~~ than elsewhere. One example of
regrowth from perennial base to ~~one~~ which
was not however, the regrowth taller than rock
grass on the plain.

Nevertire - Dandaloo. Took road passing
Boro Tank to Bogan R. First 5 or 6 ms. as at
Nevertire - mostly heavy red patches. Then
for 10 ms. red sandy loam with box, wilga,
" (Buddah) "
"turpentine" etc. Richer than in some parts,
but wet & thus diff. to estimate. Last
section to Bogan & for some way along
Bogan, heavy self-mulching brown-grey
w. red patches & several medium sized
red clay-pans. Remainder of the River
section to ~~Dandaloo~~ mostly before Tyrie a chocolate
self-mulching rather uniform, v. diff. from
any seen so far in the outback centre.
Coolabah-like trees in lines & clumps on
apparently treeless plain. Shortly before
Tyrie to Dandaloo wooded grey to medium
sandy
red loam. Dandaloo - Trangie on rising
has a lot of self-mulching mostly & quite
as heavy as Warren plains, but with

Strips of Coastal Silt grass.

The chocolate soil might be worth investigating though there were no noticeable ~~no~~. Boat

Tuesday

26/2/32 Left with Bob. Office could stay at Bundaras. Blowflies sick - Climate of Lake Cang. Grazing affects pasture by according to type of grass when grazing heaviest also actual heaviness of grazing, by preventing seeding of plants, heavily grazed. Kikuyu soil produces most fuel. Tufty stuff on waste plain not liked by stock. Almost all local grasses annuals. Area of Tangier was one of worst for hoppers.

Tangier - Nyngan. Country and crops as Tangier - Nevertire as far as Nullingadgery, when the red patches showed heavier under all-mulching, also more choc. Grass got became rarer from Nevertire, stay about Nullen. myall & bluebush similar, Chenopodium auricomum dominant. A swamp with app. permanent standing water near Nullen. Five miles from Nyngan red soil, grass returning. No more black as far as Tenant (25 mls along Bourke road.) At Cr - 19 mls. Country becomes

Aristida calycina

Aristida Behriana
Chloris truncata
Dichanthium sericeum
Hyparrhenia hirta

9 —
7 —
4 —
5 —
2 —
3 —
0
-1

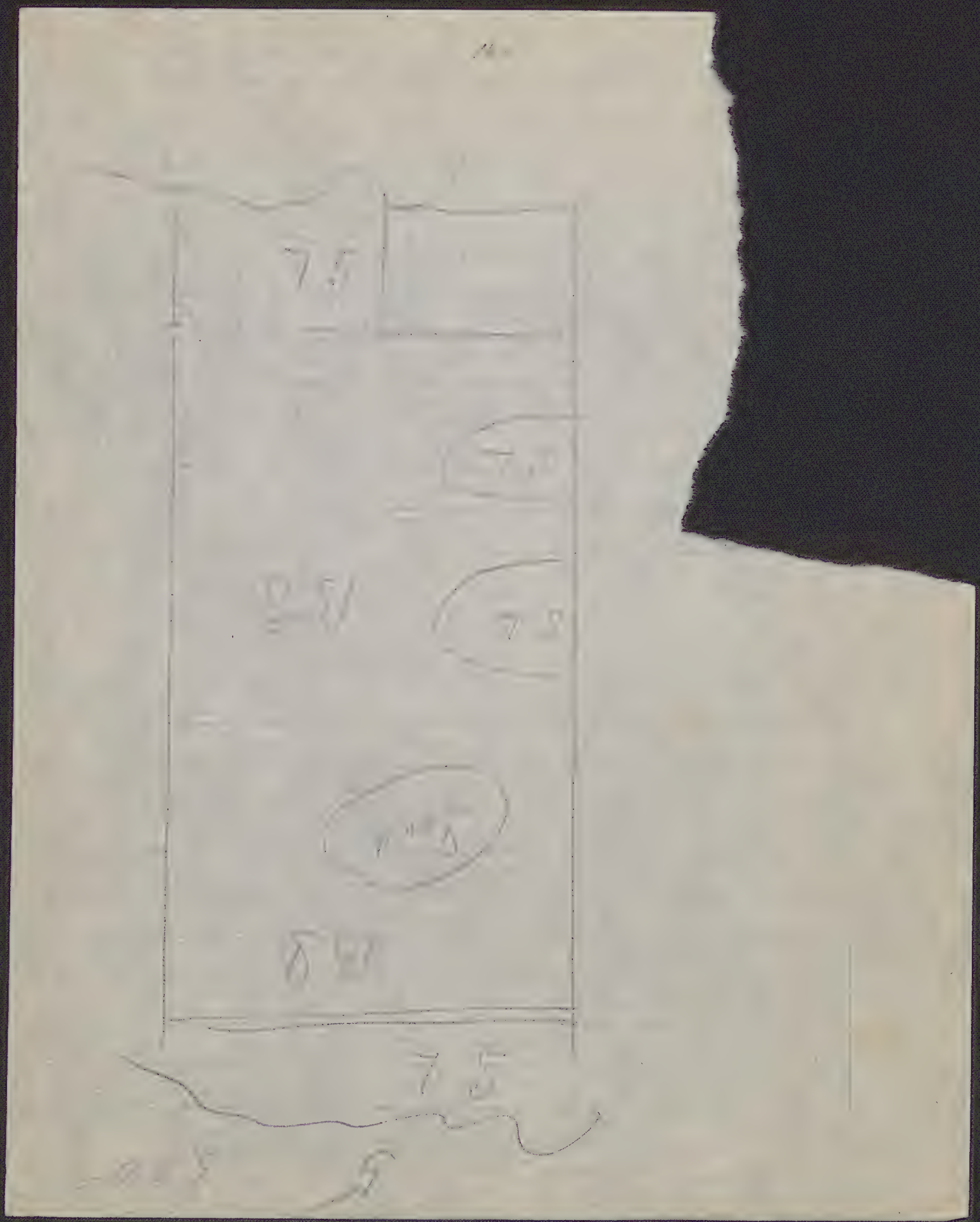
Neurachne
Mitchelliana

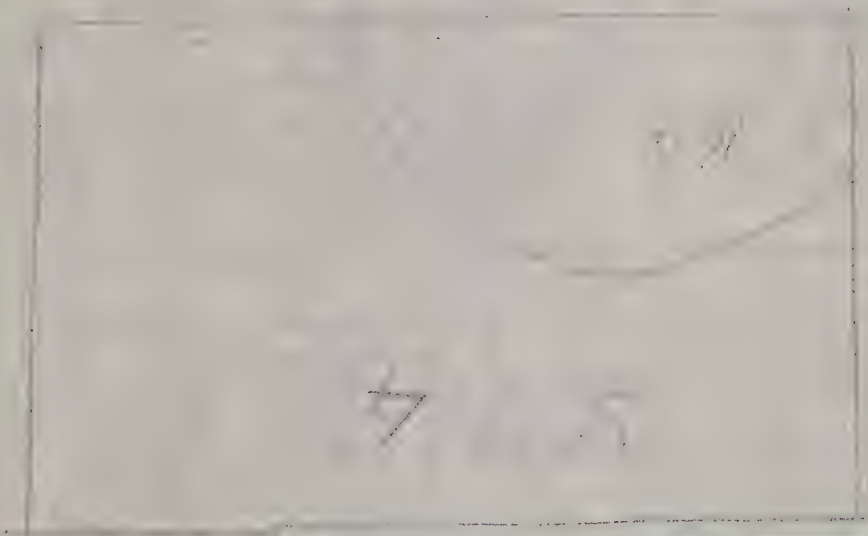
Rhagodia spinescens

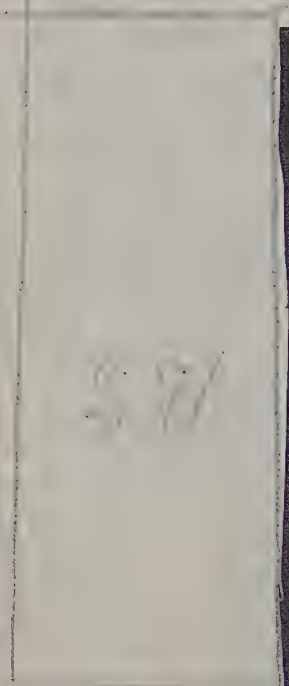
Zabrala ciripes

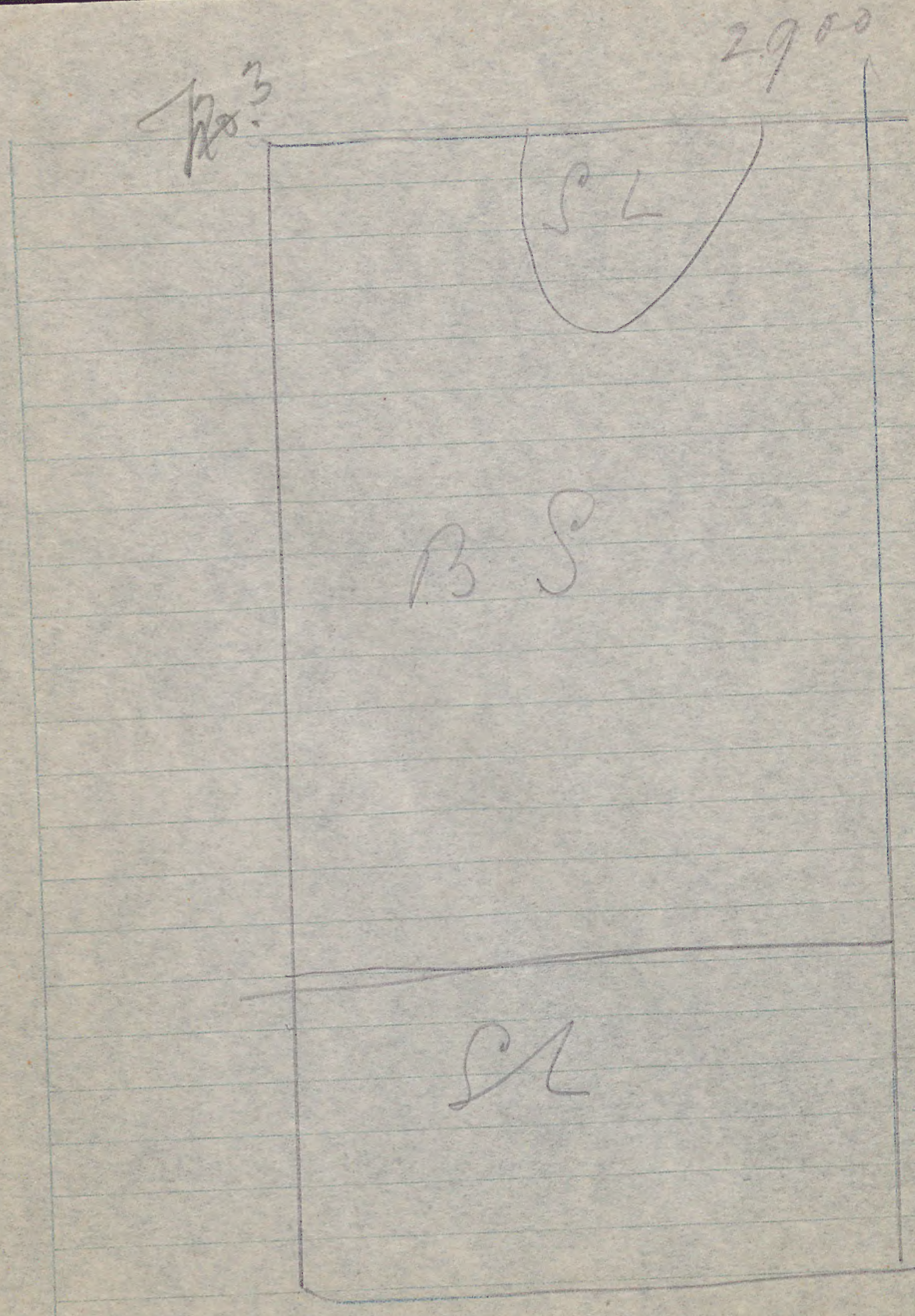
Cyperus sp. ? escalatus.

Maps of Mr. Firth's holdings.








2.900
SL
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Pos 3

2900

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163

Pos 1

2560

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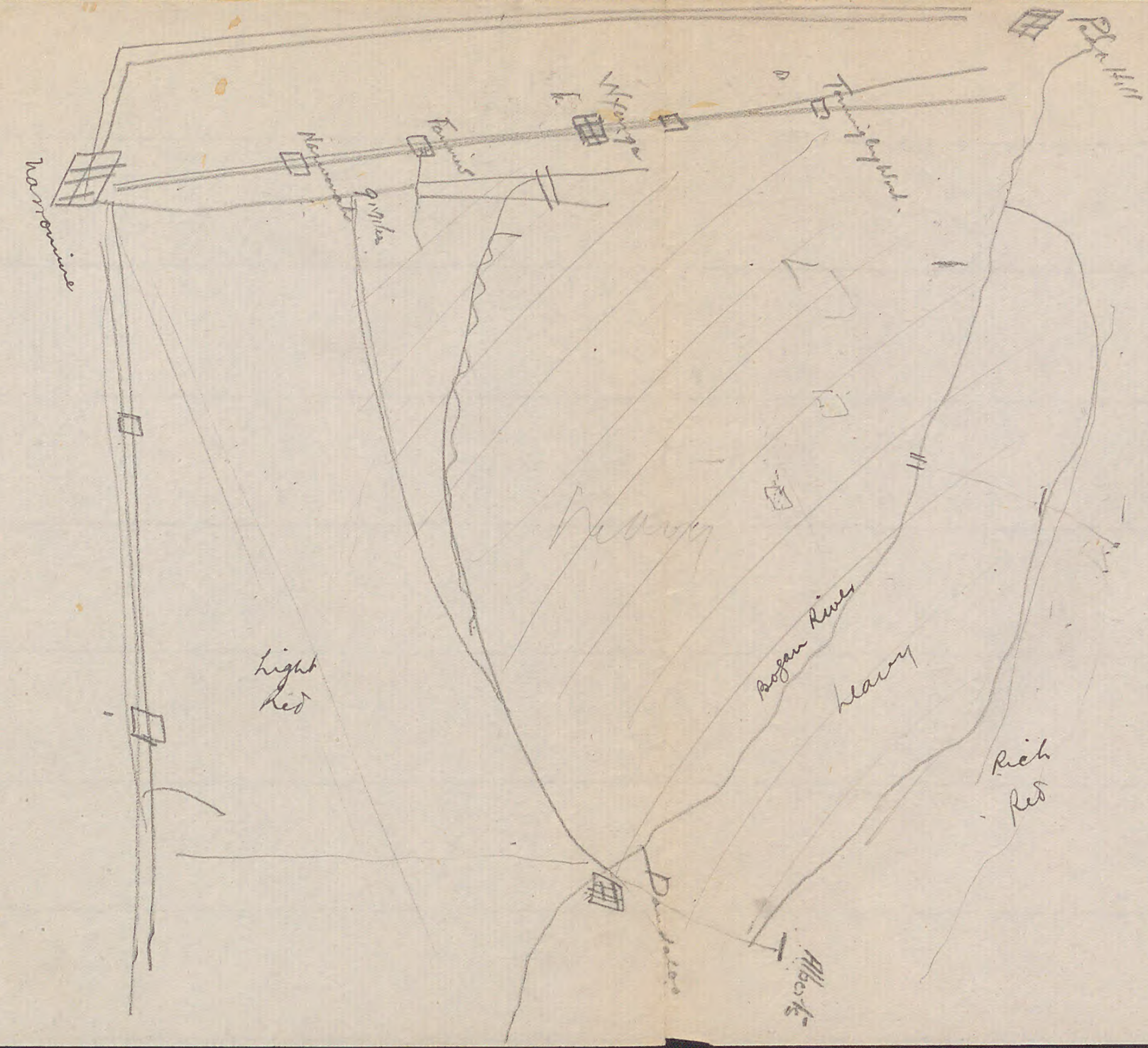

Map of region between Narromine - Trangie line and Bogan River, prepared by Mr. Tuck, agent, Narromine.

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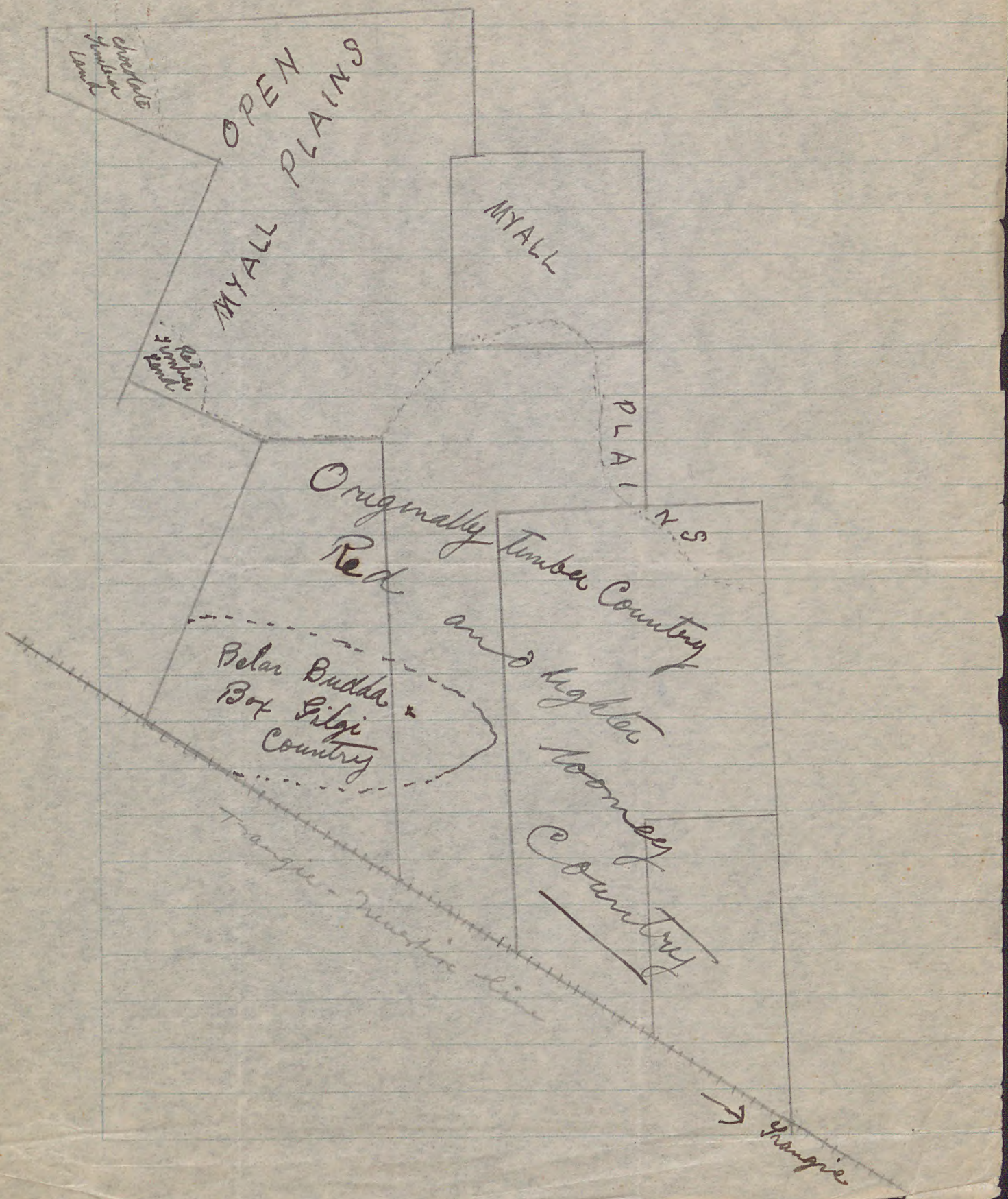
C. J. Richards "Plain Drew" Waverley